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| EXAMINER |
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PESIN, BORIS M

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| ART UNIT | PAPER NUMBER |
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2174

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05/04/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/965,073 | Applicant(s) WAKITA ET AL. | |
| | Examiner BORIS PESIN | Art Unit 2174 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Amendment

This communication is responsive to the response filed 2/05/2009.

Claims 32-35, 37-38, and 41-51 are pending in this application. Claims 32, 35, 41, 49, 50, and 51 are independent claims. In the response filed 2/05/2009, claims 32, 35, 41, 49, 50, and 51 were amended. This action is made Final.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required.

Claims 49, 50, and 51 recite "a computer-readable medium," however, the specification is silent with respect to a definition for a "computer-readable medium."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 32-35, 37-38 and 41-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brozowski et al. (US 6559871) in view of Rennison et al. (US 6154213).

In regards to claim 32, Brozowski teaches an object content structure management method for managing a content structure of a root object comprising:

expressing the content structure of said root object by a tree-structure set membership consisting of one or more objects, said one or more objects comprising one or more parent objects and one or more child objects, each child object respectively corresponding to one of said one or more parent objects (Column 5, Line 51- Column 6 Line 5) ;

defining an attribute capable of being held by said parent and child objects for each of a plurality of object types and each of the plurality of object types by a schema definition (Column 6 Lines 24-64);

managing a list of child objects capable of being held by said root object and defined by said schema definition (Column 6 Lines 24-64); and

sequentially managing a list of first child objects of one of said one or more parent objects as a start object, a list of the first child objects of each start object held by the list of the first child objects, and a second list of child objects of each first child object held by a second list of child objects of the first child objects, thereby managing a

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content structure of said start object, (See Figure 2 and Column 5, Line 51- Column 6 Line 5)

wherein a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48).

Brozowski teaches displaying nodes, but not the maximum number of child objects capable of being held are displayed in said tree structure. Rennison teaches, displaying a maximum number of the child objects capable of being held are displayed in said tree structure (See Column 38, Lines 12-24, since Rennsion displays all the nodes, he displays the maximum number of nodes capable of being held at that particular time). It would have been obvious to one of ordinary skill in the art to modify Brozowski with the teachings of Rennison and include the ability to display all the child nodes with the motivation to provide the user with more information on the screen. Since Rennison teaches that a user can specify the density of the display, the interface will allow for more information to be displayed at a certain level and thus allow for all the information to be displayed at one time.

In regards to claim 33, Brozowski-Rennsion teaches an object content structure management method according to claim 32, wherein: placeholders indicate objects that can exist as said child objects and are managed one by one for each object of a same type (Brozowski Column 13, Lines 21-48).

In regards to claim 34, Brozowski-Rennsion teaches an object content structure management method according to claim 32, further comprising: managing a plurality of objects including an exclusively selectable object that is capable of being held by a certain parent object by a schema definition of said parent object as a choice list besides said list of child objects (Brozowski See Figure 2);

managing an object selected from among a plurality of choices by a list of child objects of a parent object and managing objects other than said selected object of the choices as said placeholders indicating objects that can exist as child objects in the choice list of said selected object (Brozowski See Figure 2).

In regards to claim 35, Brozowski teaches a computer-implemented object content structure display method for displaying a content structure of a root object comprising:

expressing the content structure of said object by a tree-structure set membership consisting of one or more objects, said one or more objects comprising one or more parent objects and one or more child objects, each child object respectively corresponding to one of said one or more parent objects (Column 5, Line 51- Column 6 Line 5);

defining an attribute capable of being held by said parent and child objects for each of a plurality of object types and a type of said object by a schema definition, wherein (Column 6 Lines 24-64):

objects held by said root object as child objects are expressed by a tree structure (Column 5, Line 51- Column 6 Line 5);

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a character string representing this object type is displayed on each node of the tree structure to display a structure of the object (See Figure 2); and

a type and a value of the attribute capable of being held by an object selected from the displayed tree structure are displayed (See Figure 2); and

wherein a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48).

Brozowski teaches displaying nodes, but not the maximum number of child objects capable of being held are displayed in said tree structure. Rennison teaches, displaying a maximum number of the child objects capable of being held are displayed in said tree structure (See Column 38, Lines 12-24, since Rennsion displays all the nodes, he displays the maximum number of nodes capable of being held at that particular time). It would have been obvious to one of ordinary skill in the art to modify Brozowski with the teachings of Rennison and include the ability to display all the child nodes with the motivation to provide the user with more information on the screen. Since Rennison teaches that a user can specify the density of the display, the interface will allow for more information to be displayed at a certain level and thus allow for all the information to be displayed at one time.

In regards to claim 37, Brozowski-Rennsion teaches an object content structure display method according to claim 35, wherein: said tree structure is expressed

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hierarchically for objects to be held by said root object serving as a root configured to further hold objects (Brozowski See Figure 2); and structures below the actually existing instance objects are displayed up to a hierarchical level designated at a time of hierarchically displaying said tree structure and display of structures below the designated hierarchical level is omitted (Brozowski See Figure 2, the user chooses which nodes to see or not).

In regards to claim 38, Brozowski-Rennsion teaches an object content structure display method according to claim 35, wherein: any one of a plurality of types of objects may be held under a schema definition of types of child objects capable of being held by the root object (See Figure 2 and Column 13, Lines 21-48); all objects of choices are displayed in a tree structure as child nodes and the objects actually selected and held among the choices and the unselected choices are discriminated from each other by different icons and then displayed (See Figure 2 and Column 13, Lines 21-48).

In regards to claim 40, Brozowski-Rennsion teaches an object content structure display method according to claim 35, wherein: a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Brozowski Column 13, Lines 21-48); and one of a maximum number and a minimum number of the child objects capable of being held are displayed in said tree structure (Brozowski See Figure 2).

In regards to claim 41, Brozowski teaches an object content structure editing method for editing a content structure of a root object comprising:

expressing the content structure of said object by a tree-structure set membership consisting of one or more objects, said one or more objects comprising one or more parent objects and one or more child objects, each child object respectively corresponding to one of said one or more parent objects (Column 5, Line 51- Column 6 Line 5);

defining an attribute capable of being held by said parents and child objects for each of a plurality of object types and a type of said object by a schema definition (Column 6 Lines 24-64), wherein

objects held by said parent object as child objects are expressed by a tree structure (See Figure 2);

a character string representing the object type is displayed on each node of the tree structure to display a structure of the object (See Figure 2);

a type and a value of an attribute capable of being held by an object selected from the displayed tree structure are displayed (See Figure 2 and Column 13, Lines 21-48);

and a value to be changed is inputted and a change is indicated for said displayed attribute value, and the attribute value of the object is updated to the input value (Column 13, Lines 49-58);

an addition is indicated after designating one dummy object indicating types of objects which can be held (Column 13, Lines 21-48, and Column 13, Lines 49-58);

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wherein a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48).

Brozowski teaches displaying nodes, but not the maximum number of child objects capable of being held are displayed in said tree structure. Rennison teaches, displaying a maximum number of the child objects capable of being held are displayed in said tree structure (See Column 38, Lines 12-24, since Rennsion displays all the nodes, he displays the maximum number of nodes capable of being held at that particular time). It would have been obvious to one of ordinary skill in the art to modify Brozowski with the teachings of Rennison and include the ability to display all the child nodes with the motivation to provide the user with more information on the screen. Since Rennison teaches that a user can specify the density of the display, the interface will allow for more information to be displayed at a certain level and thus allow for all the information to be displayed at one time.

In regards to claim 42, Brozowski-Rennsion teaches an object content structure editing apparatus according to claim 41, wherein: an instance addition is indicated after one of the objects existing in the tree structure is designated (Brozowski Column 13, Lines 49-58); and an instance object of the same type as a type of the designated object is created and the object of the same type is displayed as a fraternal node of said designated object in the tree structure (Brozowski Column 5, Line 51- Column 6 Line 5 and Column 13, Lines 49-58).

In regards to claim 43, Brozowski-Rennsion teaches an object content structure editing method according to claim 42, wherein: an object permitted to be held as a plural by the schema definition is discriminated from an object prohibited from being held as a plural by the schema definition using different display colors or different icons prior to being displayed; and instance addition indication is not accepted in cases of objects prohibited from being held as a plural (Brozowski Column 13, Lines 49-58).

In regards to claim 44, Brozowski-Rennsion teaches an object content structure editing method according to claim 41, wherein: said designated dummy object is changed to an actual instance; and an icon of said designated dummy object is changed to an icon indicating the actual instance in the tree structure (Brozowski See Figure 2 and Column 13, Lines 21-48).

In regards to claim 45, Brozowski-Rennsion teaches an object content structure editing method according to claim 44, wherein: not only said designated dummy object but also ancestor objects of said designated dummy object are dummy objects (Brozowski Column 13, Lines 21-48); and the ancestor objects are sequentially changed to instances (Brozowski Column 13, Lines 21-48, and Column 13, Lines 49-58).

In regards to claim 46, Brozowski-Rennsion teaches an object content structure editing method according to claim 41, wherein:

deletion is indicated after designating the object selected from the displayed tree structure (Brozowski See Figure 2, the user is able to select which items to view or not using the + sign);

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said designated object is held as a plural (See Figure 2);

structures below the objects are deleted and display of the objects is deleted from the tree structure (Brozowski See Figure 2, the user is able to select which items to view or not using the + sign);

the deletion is indicated after designating the actually existing object and said designated object is a single object (Brozowski See Figure 2);

and nodes below the designated object are changed to dummy objects and display icons of the nodes in the tree structure are changed (Brozowski Column 13, Lines 21-48, and Column 13, Lines 49-58).

In regards to claim 47, Brozowski-Rennsion teaches an object content structure editing method according to claim 41, wherein: a selection change is indicated after one of dummy objects indicating unselected choices is designated (Brozowski See Figure 2); and the objects selected before the selection change are changed to the objects indicating choices and said designated object is changed to a selected object (Brozowski See Figure 2, and Column 13, Lines 21-48, and Column 13, Lines 49-58).

In regards to claim 48, Brozowski-Rennsion teach all the limitations of claim 41. Brozowski-Rennsion do not specifically teach that edited object contents are outputted by a description language, the description language being an MPEG-7 description language or an XML description language. Official notice is given that it is well known in the art to output contents of an object in XML description language. It would have been obvious to one of ordinary skill in the art to modify Brozowski-Rennsion and to output

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contents of an object in XML description language with the motivation to provide the user with greater flexibility.

Claim 49 is in the same context as claim 32; therefore it is rejected under similar rationale.

Claim 50 is in the same context as claim 35; therefore it is rejected under similar rationale.

Claim 51 is in the same context as claim 41; therefore it is rejected under similar rationale.

Response to Arguments

Applicant's arguments with respect to claims 32-35, 37-38, and 41-51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BORIS PESIN whose telephone number is (571)272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Boris Pesin/
Primary Examiner, Art Unit 2174